

*John*

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/532,605  
Source: PCP/10  
Date Processed by STIC: 11/16/05

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PCT

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/532,605

DATE: 11/16/2005

TIME: 08:18:02

Input Set : A:\Q87625.ST25.txt  
 Output Set: N:\CRF4\11162005\J532605.raw

3 <110> APPLICANT: Miwa, Takehiro  
 5 <120> TITLE OF INVENTION: Method for digesting proteins highly resistant to  
 denaturation  
 6 and degradation  
 8 <130> FILE REFERENCE: Q87625  
 10 <140> CURRENT APPLICATION NUMBER: US 10/532,605  
 C--> 11 <141> CURRENT FILING DATE: 2005-04-25  
 13 <150> PRIOR APPLICATION NUMBER: PCT/JP2003/013658  
 14 <151> PRIOR FILING DATE: 2003-10-24  
 16 <160> NUMBER OF SEQ ID NOS: 4  
 18 <170> SOFTWARE: PatentIn version 3.3  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 825  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Bacillus Licheniformis  
 26 <220> FEATURE:  
 27 <221> NAME/KEY: CDS  
 28 <222> LOCATION: (1)..(825)  
 30 <400> SEQUENCE: 1  
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 32 Ala Gln Thr Val Pro Tyr Gly Ile Pro Leu Ile Lys Ala Asp Lys Val  
 33 1 5 10 15  
 35 cag gcc caa ggt tat aaa ggg gca aat gtc aaa gtc ggt atc att gat 96  
 36 Gln Ala Gln Gly Tyr Lys Gly Ala Asn Val Lys Val Gly Ile Ile Asp  
 37 20 25 30  
 39 acg gga atc gct tcg tct cat aca gac ttg aag gta gtc ggc gga gca 144  
 40 Thr Gly Ile Ala Ser Ser His Thr Asp Leu Lys Val Val Gly Gly Ala  
 41 35 40 45  
 43 agc ttt gta tct ggt gaa agt tat aat acg gac ggt aac gga cac ggc 192  
 44 Ser Phe Val Ser Gly Glu Ser Tyr Asn Thr Asp Gly Asn Gly His Gly  
 45 50 55 60  
 47 aca cat gtt gcc gga aca gtc gcg gct gac aat aca aca ggc gtt 240  
 48 Thr His Val Ala Gly Thr Val Ala Ala Leu Asp Asn Thr Thr Gly Val  
 49 65 70 75 80  
 51 tta ggc gtt gca ccg aac gtc tcc ctc tac gcg att aag gtc ttg aat 288  
 52 Leu Gly Val Ala Pro Asn Val Ser Leu Tyr Ala Ile Lys Val Leu Asn  
 53 85 90 95  
 55 tca agc gga agc gga aca tac agc gca atc gtc agc gga att gag tgg 336  
 56 Ser Ser Gly Ser Gly Thr Tyr Ser Ala Ile Val Ser Gly Ile Glu Trp  
 57 100 105 110  
 59 gcc aca caa aac ggc ctg gat gtc atc aac atg agc ctc ggc gga cca 384  
 60 Ala Thr Gln Asn Gly Leu Asp Val Ile Asn Met Ser Leu Gly Gly Pro  
 61 115 120 125  
 63 tcc ggc tca act gcg ctg aaa cag gct gtc gat aaa gca tat gcc agc 432

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64	Ser	Gly	Ser	Thr	Ala	Leu	Lys	Gln	Ala	Val	Asp	Lys	Ala	Tyr	Ala	Ser	
65	130				135					140							
67	gga	att	gtc	gta	gtg	gca	gca	gct	ggg	aac	agc	gga	tct	tcc	ggc	agc	480
68	Gly	Ile	Val	Val	Val	Ala	Ala	Ala	Gly	Asn	Ser	Gly	Ser	Ser	Gly	Ser	
69	145				150					155					160		
71	caa	aac	aca	atc	ggc	tat	ccg	gca	aaa	tat	gac	tcc	gtc	atc	gcc	gtc	528
72	Gln	Asn	Thr	Ile	Gly	Tyr	Pro	Ala	Lys	Tyr	Asp	Ser	Val	Ile	Ala	Val	
73					165				170					175			
75	ggt	gct	gtt	gac	agc	aac	aaa	aac	aga	gct	tca	ttc	tcc	agc	gtc	ggc	576
76	Gly	Ala	Val	Asp	Ser	Asn	Lys	Asn	Arg	Ala	Ser	Phe	Ser	Ser	Val	Gly	
77					180				185					190			
79	tca	gag	ctt	gaa	gtc	atg	gct	cct	ggc	gtc	agc	gta	tac	agc	aca	tat	624
80	Ser	Glu	Leu	Glu	Val	Met	Ala	Pro	Gly	Val	Ser	Val	Tyr	Ser	Thr	Tyr	
81					195			200			205						
83	cct	tct	aac	acg	tac	aca	tca	ttg	aac	gga	act	tca	atg	gct	tcg	cct	672
84	Pro	Ser	Asn	Thr	Tyr	Thr	Ser	Leu	Asn	Gly	Thr	Ser	Met	Ala	Ser	Pro	
85					210			215			220						
87	cat	gta	gct	gga	gca	gca	gca	ttg	atc	ttg	tcg	aaa	tac	cct	acg	ctt	720
88	His	Val	Ala	Gly	Ala	Ala	Ala	Leu	Ile	Leu	Ser	Lys	Tyr	Pro	Thr	Leu	
89	225				230			235			240						
91	tca	gct	tcc	caa	gtt	cgc	aac	cgc	ctc	tca	agc	act	gct	act	aat	ttg	768
92	Ser	Ala	Ser	Gln	Val	Arg	Asn	Arg	Leu	Ser	Ser	Thr	Ala	Thr	Asn	Leu	
93					245			250			255						
95	gga	gat	tcc	ttc	tac	tac	ggc	aaa	ggg	ctg	atc	aat	gta	gaa	gct	gcc	816
96	Gly	Asp	Ser	Phe	Tyr	Tyr	Gly	Lys	Gly	Leu	Ile	Asn	Val	Glu	Ala	Ala	
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100	Ala	Gln															
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112	1				5				10			15					
115	Gln	Ala	Gln	Gly	Tyr	Lys	Gly	Ala	Asn	Val	Lys	Val	Gly	Ile	Ile	Asp	
116					20				25			30					
119	Thr	Gly	Ile	Ala	Ser	Ser	His	Thr	Asp	Leu	Lys	Val	Val	Gly	Gly	Ala	
120					35			40			45						
123	Ser	Phe	Val	Ser	Gly	Glu	Ser	Tyr	Asn	Thr	Asp	Gly	Asn	Gly	His	Gly	
124					50			55			60						
127	Thr	His	Val	Ala	Gly	Thr	Val	Ala	Ala	Leu	Asp	Asn	Thr	Thr	Gly	Val	
128					65			70			75			80			
131	Leu	Gly	Val	Ala	Pro	Asn	Val	Ser	Leu	Tyr	Ala	Ile	Lys	Val	Leu	Asn	
132						85				90			95				
135	Ser	Ser	Gly	Ser	Gly	Thr	Tyr	Ser	Ala	Ile	Val	Ser	Gly	Ile	Glu	Trp	
136						100			105			110					
139	Ala	Thr	Gln	Asn	Gly	Leu	Asp	Val	Ile	Asn	Met	Ser	Leu	Gly	Gly	Pro	
140					115			120			125						

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143 Ser Gly Ser Thr Ala Leu Lys Gln Ala Val Asp Lys Ala Tyr Ala Ser  
144 130 135 140  
147 Gly Ile Val Val Val Ala Ala Gly Asn Ser Gly Ser Ser Gly Ser  
148 145 150 155 160  
151 Gln Asn Thr Ile Gly Tyr Pro Ala Lys Tyr Asp Ser Val Ile Ala Val  
152 165 170 175  
155 Gly Ala Val Asp Ser Asn Lys Asn Arg Ala Ser Phe Ser Ser Val Gly  
156 180 185 190  
159 Ser Glu Leu Glu Val Met Ala Pro Gly Val Ser Val Tyr Ser Thr Tyr  
160 195 200 205  
163 Pro Ser Asn Thr Tyr Thr Ser Leu Asn Gly Thr Ser Met Ala Ser Pro  
164 210 215 220  
167 His Val Ala Gly Ala Ala Leu Ile Leu Ser Lys Tyr Pro Thr Leu  
168 225 230 235 240  
171 Ser Ala Ser Gln Val Arg Asn Arg Leu Ser Ser Thr Ala Thr Asn Leu  
172 245 250 255  
175 Gly Asp Ser Phe Tyr Tyr Gly Lys Gly Leu Ile Asn Val Glu Ala Ala  
176 260 265 270  
179 Ala Gln  
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184 <211> LENGTH: 20  
185 <212> TYPE: DNA  
186 <213> ORGANISM: Artificial Sequence  
188 <220> FEATURE:  
189 <223> OTHER INFORMATION: Chemically - synthesized Primer PDE-2  
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198 <213> ORGANISM: Artificial Sequence  
200 <220> FEATURE:  
201 <223> OTHER INFORMATION: Chemically-synthesized Primer PDE-5  
203 <400> SEQUENCE: 4  
204 cctgcgccag gagccatgac 20

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/532,605

DATE: 11/16/2005

TIME: 08:18:03

Input Set : A:\Q87625.ST25.txt

Output Set: N:\CRF4\11162005\J532605.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date